

Recovery Plan Action Status

Plan Name: Approved Recovery Plan for the Mead's Milkweed (*Asclepias meadii*)

Plan Status: Final

Plan Date: 22-Sep-03

Lead Agency: USFWS

Lead Office: Chicago Ecological Service Field Office

(847)

361-2253)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Mead's milkweed (<i>Asclepias meadii</i>)	1	1.1	Assess the viability of each population	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey	Research: Demographic Studies, Research: General, Research: Genetics, Research: Habitat Status, Research: Management Techniques, Research: Population Surveys	Labor type not yet selected	
Mead's milkweed (<i>Asclepias meadii</i>)	2	1.2	Contact landowners and encourage conservation	Ongoing Current			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey	Management: Land Use, Management: Other, Management: Planning, Other	Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	Reduced to 3,000 after year 3

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Mead's milkweed (Asclepias meadii)	2	1.3	Seek legal dedication	Not Started			Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves	Acquisition, Acquisition: Easement, Acquisition: Exchange, Acquisition: Fee Title, Acquisition: General, Acquisition: Lease, Acquisition: Other	Internal Administrative, Internal Field Assistance	
Mead's milkweed (Asclepias meadii)	2	1.4	Increase number of sites managed or owned for the conservation of plant communities associated with Mead's milkweed in perpetuity	Not Started			The Nature Conservancy, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves	Acquisition, Acquisition: Easement, Acquisition: Exchange, Acquisition: Fee Title, Acquisition: General, Acquisition: Lease, Acquisition: Management Agreement, Acquisition: Other	Internal Administrative, Internal Field Assistance, Internal Technical Assistance	

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Mead's milkweed (Asclepias meadii)	2	2.1	Conduct management assessment of public and private lands	Not Started			U.S. Fish and Wildlife Service, U.S. Forest Service, The Nature Conservancy, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey	Research, Research: Demographic Studies, Research: General, Research: Habitat Status, Research: Population Surveys	Contract, Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	1	2.2	Perform prescribed burns on a regular basis in habitat with extant populations	Ongoing Current			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves	Management, Management: General, Management: Habitat Maintenance and Manipulation	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Mead's milkweed (Asclepias meadii)	1	2.3	Control invasive species in habitat with extant populations of Mead's milkweed	Complete			U.S. Fish and Wildlife Service, U.S. Forest Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves	Management, Management: General, Management: Habitat Maintenance and Manipulation, Management: Predator and Competitor Control	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Mead's milkweed (Asclepias meadii)	1	3.1.1	Estimate the number of ramets and genotypes by collecting morphological data	Ongoing Current			U.S. Fish and Wildlife Service, U.S. Forest Service, The Nature Conservancy, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Research, Research: Demographic Studies, Research: General, Research: Genetics, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Mead's milkweed (Asclepias meadii)	1	3.1.2	Determine if genetic lineages occur among populations	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Research: Genetics	Graduate Student, Internal Field Assistance, Internal Technical Assistance, Species Expert	Reduce to 15,000 after year 3
Mead's milkweed (Asclepias meadii)	1	3.1.3	Increase genetic diversity by introducing seeds or plants	Ongoing Current			U.S. Fish and Wildlife Service, The Nature Conservancy, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves, Morton Arboretum, Natural Resources Conservation Service	Management: Propagation, Management: Reintroduction	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	

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Mead's milkweed (Asclepias meadii)	1	3.2.1	Select sites for augmentation based on variables in the population viability index	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves, Morton Arboretum	Research, Research: Demographic Studies, Research: General, Research: Genetics, Research: Habitat Status, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Mead's milkweed (Asclepias meadii)	2	3.3.1	Establish new populations using seeds or plants	Not Started			U.S. Fish and Wildlife Service, U.S. Forest Service, The Nature Conservancy, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Kansas Ecological Reserves, Morton Arboretum	Management: Propagation, Management: Reintroduction, Research: Propagation	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Mead's milkweed (Asclepias meadii)	3	39	Produce a fact sheet and make it available on Service website	Not Started			U.S. Fish and Wildlife Service	Work type not yet selected	Labor type not yet selected	May need periodic updates

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Mead's milkweed (Asclepias meadii)	3	4.1	Survey for new populations in Eastern Kansas - Osage Plains	Ongoing Current			Kansas Biological Survey	Research: Population Surveys	Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.10	Survey for new populations in Western Illinois - Western Forest prairie	Not Started			U.S. Fish and Wildlife Service, Illinois Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.11	Survey for new populations in Southern Illinois - Shawnee Hills	Not Started			U.S. Fish and Wildlife Service, U.S. Forest Service, Illinois Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.12	Survey for new populations in Southwest Wisconsin - Driftless	Not Started			U.S. Fish and Wildlife Service, Wisconsin Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.13	Survey for new populations in Northern Illinois - Grand Prairie	Not Started			U.S. Fish and Wildlife Service, Illinois Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.14	Survey for new populations in Northwest Indiana - Grand Prairie	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.15	Update Site Occurrence information annually and provide information to State surveys and USFWS	Ongoing Current			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert, Volunteer	
Mead's milkweed (Asclepias meadii)	3	4.2	Survey for new populations in Western Missouri - Osage Plains	Not Started			U.S. Fish and Wildlife Service, Missouri Department of Conservation	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Mead's milkweed (Asclepias meadii)	3	4.3	Survey for new populations in Western Missouri - Ozark- Springfield Plateau	Not Started			U.S. Fish and Wildlife Service, Missouri Department of Conservation	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.3	Survey for new populations in Western Missouri - Ozark Border	Not Started			U.S. Fish and Wildlife Service, Missouri Department of Conservation	Work type not yet selected	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.5	Survey for new populations in Southeast Missouri - Ozark-St. Francois Mountains	Not Started			U.S. Fish and Wildlife Service, Missouri Department of Conservation	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.6	Survey for new populations in Northern Kansas - Glaciated	Not Started			U.S. Fish and Wildlife Service, Kansas Biological Survey	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.7	Survey for new populations in Northern Missouri - Glaciated Plains	Not Started			U.S. Fish and Wildlife Service, Missouri Department of Conservation	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	4.8	Survey for new populations in Southwest Iowa - Southern Iowa Drift Plain	Not Started			U.S. Fish and Wildlife Service, Iowa Department of Natural Resources	Research: Population Surveys	Labor type not yet selected	
Mead's milkweed (Asclepias meadii)	3	4.9	Survey for new populations in Eastern Iowa - Western Forest-prairie	Not Started			U.S. Fish and Wildlife Service, Iowa Department of Natural Resources	Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Mead's milkweed (Asclepias meadii)	2	5.1	Evaluate response to different prescribed fire regimes	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Work type not yet selected	Labor type not yet selected	
Mead's milkweed (Asclepias meadii)	2	5.2	Evaluate the use of herbicide to control invasive species	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Work type not yet selected	Labor type not yet selected	
Mead's milkweed (Asclepias meadii)	2	5.3	Determine the effects of different hay mowing regimes/intervals	Not Started			U.S. Fish and Wildlife Service, Universities, Missouri Department of Conservation, Iowa Department of Natural Resources, Kansas Biological Survey, Morton Arboretum	Research: Demographic Studies, Research: Management Techniques, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Mead's milkweed (Asclepias meadii)	2	5.4	Conduct studies on seedling ecology and establishment	Not Started			U.S. Fish and Wildlife Service, Universities, Morton Arboretum, Natural Resources Conservation Service	Research: Demographic Studies, Research: Propagation, Research: Reintroduction	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	2	5.5	Conduct studies on juvenile plant ecology and establishment	Not Started			U.S. Fish and Wildlife Service, Universities, Morton Arboretum, Natural Resources Conservation Service	Research: Propagation, Research: Reintroduction	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	1	5.6	Assess survivorship and potential for outbreeding depression	Not Started			To be determined, Universities, Morton Arboretum	Research: Demographic Studies, Research: Genetics, Research: Population Surveys	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	2	5.7	Determine Mead's milkweed pollinators and their management needs	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Research	Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Mead's milkweed (Asclepias meadii)	3	5.8	Identify external factors affecting life history stages	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Research, Research: Competition, Research: Disease, Research: General, Research: Management Techniques, Research: Population Surveys, Research: Predation	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	2	6.1	Collect and store seeds	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Universities, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum, Natural Resources Conservation Service	Research: Other Information, Research: Propagation, Research: Reintroduction	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	2	6.2	Grow and maintain plants	Ongoing Current			U.S. Forest Service, Morton Arboretum, Natural Resources Conservation Service	Management: Reintroduction, Research: Propagation, Research: Reintroduction	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	2	7.2	Hold workshops on managing Mead's milkweed sites	Not Started			U.S. Fish and Wildlife Service	Other: Information and Education	Internal Field Assistance, Internal Technical Assistance, Species Expert	

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Mead's milkweed (Asclepias meadii)	3	7.3	Create a traveling display	Not Started			U.S. Fish and Wildlife Service	Other: Information and Education	Internal Field Assistance, Internal Technical Assistance	May need periodic updates
Mead's milkweed (Asclepias meadii)	3	7.4	Promote new reports and press releases	Ongoing Current			U.S. Fish and Wildlife Service	Other: Information and Education	Internal Field Assistance, Internal Technical Assistance, Species Expert	
Mead's milkweed (Asclepias meadii)	3	8.1	Reassess the viability of each population	Not Started			U.S. Fish and Wildlife Service, Indiana Department of Natural Resources, Wisconsin Department of Natural Resources, Missouri Department of Conservation, Iowa Department of Natural Resources, Illinois Department of Natural Resources, Illinois Nature Preserve Commission, Kansas Biological Survey, Morton Arboretum	Research, Research: Demographic Studies, Research: General, Research: Genetics, Research: Habitat Status, Research: Population Surveys	Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert	Requires periodic updates
Mead's milkweed (Asclepias meadii)	3	8.2	Develop a post-delisting monitoring plan	Not Started			U.S. Fish and Wildlife Service	Research: Demographic Studies, Research: General, Research: Genetics, Research: Population Surveys	Internal Administrative, Internal Field Assistance, Internal Technical Assistance, Species Expert	